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# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

### Division of Oil, Gas and Mining

JOHN R. BAZA  
Division Director

April 19, 2009

Lee R. Brown  
US Magnesium LLC  
238 North 2200 West  
Salt Lake City, UT 84116-2921

Subject: Revised First Review of Notice of Intention to Commence Large Mining Operations, US Magnesium LLC, Rowley/Stansbury Mine, M0450008, Tooele County, Utah

Dear Mr. Brown:

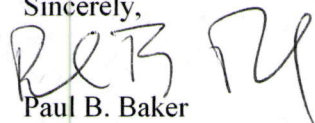
The Division has revised its review of your Notice of Intention to Commence Large Mining Operations for the Rowley/Stansbury Mine which was received October 22, 2008. The attached comments will need to be addressed before tentative approval may be granted.

The comments are listed under the applicable Minerals Rule heading. Please address only those items requested in the attached technical review by sending replacement pages of the original mining notice using **redline and strikeout** text. After the notice is determined technically complete and we are prepared to issue final approval, we will ask that you send us two clean copies of the complete and corrected plan. Upon final approval of the permit, we will return one copy stamped "approved" for your records.

As you respond to the comments in this review, the Division will likely have deficiencies relating to those responses, and modifications to the plan could be needed in the future if requirements imposed by regulatory entities change.

The Division will suspend further review of the Notice of Intention until your response to this letter is received. If you have any questions in this regard please contact me at 801-538-5261, or Leslie Heppler at 801-538-5257. Thank you for your cooperation in completing this permitting action.

Sincerely,

  
Paul B. Baker  
Minerals Program Manager

PBB:lah:vs

Attachment: Review

cc: [stan\\_perkes@blm.gov](mailto:stan_perkes@blm.gov)

Dave Grierson, Forestry, Fire and State Lands

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**FIRST REVIEW OF NOTICE OF INTENTION  
TO COMMENCE LARGE MINING OPERATIONS**

**US Magnesium LLC  
Rowley/Stansbury Mine**

**M0450008  
Revised April 19, 2010**

**General Comments:**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
1	General	Submittal should be formatted to easily incorporate additional revisions and amendments.	lah	
2	All	The Division suggests that the plan be organized and labeled according to the R647 rules.	lah	

**R647-4-104 – Operator's, Surface and Mineral Ownership**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
3	Page 7	Include the responsible party with operator information, the corporate officer(s) that will sign all documents.	lah	
4	Omission	Include the name, permanent mailing address and phone number of <b>all</b> surface and mineral landowners to be affected. Some of the affected land may be managed by the Bureau of Land Management.	lah	

**R647-4-105 - Maps, Drawings & Photographs**

**General Map Comments**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
5	All	The scales on Figures 4.2 and 4.3 are not consistent with the scale on Figure 4.1. These drawings and Figure 4.4 contain notes that they are confidential although the Division recognizes this may be an oversight. If it is an oversight, please remove the statements about the drawings being confidential. If this is not an oversight, please explain what information on the drawings provides information not commonly available about the location, size, and nature of the mineral deposit.	lah & pbb	



**Specific Map Comments**

**105.1 Topographic base map, boundaries, pre-act disturbance**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
6	Fig 4.1	Please label the green highlighter line on the map or in a legend.	lah	
7	Omission	The plan needs to include a map showing property boundaries of surface ownership of all lands which are to be affected by the mining operations.	lah	
8	Omission	Utilities are not shown on Figure 4.1 as listed in text on page 9. The rule citations on Page 9 should be R647-4-105 through R647-4-105.1.14.	lah	
9	Figure 4.1	Figure 8.1 shows ponds or a lake area in the North ½ of Section 26 and the NW ¼ of Township 1 North, Range 8 West. This area is not within the green line on Figure 4.1 (affected area?) and is not within the permit area for Cargill to the south. Is this part of the mining operation, or is it an unaffected part of the lake?	pbb	

**105.2 Surface facilities map**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
10	Omission	Not all facilities for the site have been included. The USGS map (Figure 4.1) does not match Figures 4.2, 4.3, and 4.4. As per 105.2.12, include a map with a border clearly outlining the acreage proposed to be disturbed by mining operations.	lah	

**105.3 Drawings or Cross Sections (slopes, roads, pads, etc.)**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
11	Omission	Please include plans, profiles and cross sections of roads or other earthen structures to be left as part of the postmining land use. This would include cross sections of the dikes and ponds greater than 20 acre-feet in storage capacity and any slopes to be left steeper than 2H:1H.	lah	
12	Omission	The solar ponds are shown and defined on Figures 4.2 and 4.3, but other hydrology structures are not defined for the rest of the operation.	lah	



Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
13	Omission	Please include either a reclamation treatments map or adequate detail on Figures 4.2 and 4.3 to show those areas that will be reclaimed and the degree of reclamation that will occur, including acreage figures. For example, Section 6.2.2 discusses reclamation of two canals, but the Division does not have information about the amount of earthwork this would entail. This will be used to ensure there will be adequate bond.	lah & pbb	
14	General	Depending upon the quality of information submitted, additional comments could be forth coming.	lah	

#### 105.4 Photographs

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
15	General	More photographs are recommended by OGM, but not required.	lah	

#### R647-4-109 - Impact Assessment

##### 109.1 Impacts to surface & groundwater systems

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
16	Page 22	Attachment 2 has not been signed by and stamped by a PE. This is a requirement of the Clean Water Act and not the Division.	lah	

#### R647-4-110 - Reclamation Plan

##### 110.1 Current & post mining land use

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
17	Page 16	The plan says that subsequent to reclamation, the land use will continue to provide for solar ponding. This implies that mining will be a postmining land use which, by simple definition of these terms, cannot be allowed. Please make appropriate changes and include postmining land uses for areas outside the evaporation ponds, i.e. the holding pond, regraded canals, etc.	lah & pbb	



### 110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
18	Figure 4.4	No detail is included on the reclamation of the star pond. Elsewhere the star pond is named "the holding pond." Please use consistent terminology.	lah	
19	Page 17 6.2.2	How will the canals be reclaimed?	lah	
20	Page 17 6.2.3	The Division assumes there are other pipelines besides the one mentioned in this section. How will they be reclaimed?	lah	
21	Page 17 6.2.4	As shown on maps it is difficult or impossible to locate roads indicated by the "green lines."	lah	
22	Page 17 6.2.6	In Section 6.2.6, the plan says, "Equipment and certain appurtenant components . . . will be disassembled and staged in order to maximize possible salvage values." Please include more definition on what equipment and structural components are disassembled and which components are not.	lah	

### 110.3 Description of facilities to be left (post mining use)

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
23	Page 16, Section 6.2.1	This section refers to "Figures 4.3 and 4.3" which is apparently a typographical error.	pbb	

### 110.5 Revegetation planting program

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
24	Omission	There are a few places where revegetation may be possible, such as the holding pond area and the canals. Please include a revegetation plan for these areas.	pbb	

### R647-4-112 – Variance

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
25	Omission	The application does not contain a variance section, and the Division assumes no variances are being requested. Please state whether any variances are being requested. If they are, the plan will need to have proper documentation to support the request(s).	lah	



**R647-4-113 – Surety**

Comment #	Sheet/Page/Map/Table #	Comments	Initials	Review Action
26	General	The Division requests that you use bonding worksheets and formats provided by the Division. When finalized, these forms will be incorporated into the mine plan.	lah	
27	General	The bond for any disturbance on BLM land needs to be calculated separately.	lah	
28	General	The surety calculation is lacking in detail. As additional information is received from the operator, there will likely be additional comments.	lah	